

CLAIMS

1. Process for the continuous production of a composition comprising rubber (20), a hydrocarbon resin (22) and a solvent (26) through the use of at least two two-screw extruders (10a, 10b) placed in series.
2. Production process according to claim 1, providing for addition of the said solvent (26) at at least one point downstream from the initial section of the first extruder (10a).
3. Production process according to either of the preceding claims, through the use of a first and a second extruder (10a, 10b) placed in series.
4. Production process according to claim 3, in which the said solvent (26) is added in a fractionated way at a plurality of points downstream from the initial section of the first extruder (10a) and at a plurality of points located along the second extruder (10b).
5. Production process according to claim 4, in which a fraction of solvent (26) is added to the composition leaving the first extruder (10a) before it is placed in the second extruder (10b).
6. Production process according to any of the preceding claims, in which the said rubber (20) is added in the initial section of the first extruder (10a).

7. Production process according to any of the preceding claims, in which the said resin (22) is added in the initial section of the first extruder (10a).

8. Production process according to any of preceding claims 1 to 6, in which a fraction of the said resin (22) is added to the initial section of the first extruder (10a) and the remaining fraction is added at a point downstream from the initial section of the first extruder (10a).

9. Production process according to any of the preceding claims 3 to 8, in which the rotation speed of the screws of the first extruder (10a) lies between 20 and 300 rpm, while the rotation speed of the screws of the second extruder (10b) lies between 60 and 600 rpm.

10. Production process according to any of the preceding claims, in which the said rubber (20) is selected from the group comprising natural rubbers, synthetic rubbers and their mixtures.

11. Production process according to any of the preceding claims, in which the said hydrocarbon resin (22) has adhesion-imparting properties.

12. Production process according to any of the preceding claims, in which the said solvent (26) is selected from the group comprising pentane, hexane, heptane, dichloropropane and their mixtures.

13. Production process according to any of the preceding claims, in which the said at least two two-screw extruders (10a, 10b) are of the co-rotating type.

14. Production process according to any of the preceding claims, in which at least one of the said at least two two-screw extruders (10a, 10b) has a ratio between the outer diameter and the inner diameter of the screws lying between 1.4 and 2.0 and preferably between 1.55 and 1.8.

15. Production process according to any of preceding claims from 3 to 14, in which the temperature of the composition within the second extruder (10b) is less than the temperature of the composition in the first extruder (10a).